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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of : Group Art Unit: 2152

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Entitled: WIRELESS : Examiner: Hoang, Hieu T.

PROGRAMMABLE USER
INTERACTION SYSTEM WITH
MACHINE-READABLE TAGS FOR

PHYSICAL OBJECTS

Serial No.: 10/608,240

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APPEAL BRIEF

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I. REAL PARTY IN INTEREST

The subject application is assigned to Microsoft Corporation, of Redmond Washington.

II. RELATED APPEALS AND INTERFERENCES

There are no known related appeals or interferences.

III. STATUS OF CLAIMS

Claims 1-24 represent all claims currently pending and rejected in the application. These claims are provided for reference in the attached Appeal Brief Appendix. The rejection of claims 1-24 is hereby appealed.

IV. STATUS OF AMENDMENTS

No amendments are currently pending.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER.

As illustrated in independent Claim 1, the Appellants claim a wireless programmable user interaction system providing user interaction with networked services relating to physical objects that have associated machine-readable tags. (paragraph [0008], FIG. 2, 100) The system employs a portable interaction device (FIG. 1, 108) in wireless communication with a computer network (FIG.1, 114), the portable interaction device including a portable computing device (FIG. 1, 112), with a payload processor (FIG. 2, 218) and an associated machine-readable tag reader (FIG. 1, 110), wherein the portable interaction device generates tag identity information (FIG. 2, 204) relating to a selected physical object (FIG. 1, 104) upon operating the machine-readable tag reader to read a machine-readable tag (FIG.1, 102) associated with the selected physical object. (paragraph [0006]0. The system also employs an interaction system catalog (FIG. 2, 208) that can indicate the types of information, interactions and

computer network services that are available for the selected physical object, in the portable computing device of the portable interaction device, storing tag format information that correlates the tag identity information with an identity information category (FIG. 2, 204) to obtain one or more functional payloads (FIG. 2, 216) operable by the payload processor (FIG. 2, 218) (paragraph [0007]; and a payload delivery service (FIG. 2, 214) that delivers to the payload processor (FIG. 2, 218) a selected functional payload, received via the wireless communication (FIG. 1, 114, 116), to be executed by the payload processor to provide to the user a networked service corresponding to the selected physical object [paragraph 0007]. The system also employs a catalog explorer module (FIG. 2, 228) that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags. (paragraphs [0020], [0022], [0024])

Additionally, as illustrated in independent Claim 12, the Appellants claim a portable interaction device (FIG. 1, 108) with means for wireless communication with a computer network (FIG. 2, 116), the portable interaction device including a portable computing device (FIG. 2, 112) and an associated machine-readable tag reader (FIG. 2, 110), wherein the portable interaction device generates tag identity information upon operating the machine-readable tag reader to read a machine-readable tag, user interaction software stored on the portable computing device and providing user interaction with networked services relating to selected physical objects that have associated machine-readable tags (paragraph [0006], [0015-0017], FIG. 1, 100, 112, 116). The portable interaction device employs a payload processor operating on the portable computing device comprising a tag reader.(paragraph [0006]) It also employs an interaction system catalog (FIG. 2, 208) that can indicate the types of information, interactions and computer network services that are available for the selected physical object, in the portable computing device of the portable interaction device, storing tag format information that correlates the tag identity information with an identity information category (FIG. 2, 204) to obtain one or more functional payloads (FIG. 2, 216) operable

by the payload processor (FIG. 2, 218; paragraph [0007]). The portable interaction device (FIG. 2, 112) also employs a payload delivery service (FIG. 2, 214) that delivers to the payload processor (FIG. 2, 218) a selected functional payload, received via the wireless communication (FIG. 1, 114), to be executed by the payload processor to provide to the user (FIG. 1, 106) a networked service corresponding to the selected physical object (paragraph [0007]). Additionally, the portable interaction device also employs a catalog explorer module (FIG. 2, 228) that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags (paragraphs [0020], [0022], [0024]).

Additionally, as illustrated in Claim 19, the Appellants claim a wireless programmable user interaction system (FIG. 1, 100) providing user interaction with networked services relating to physical objects that have associated machine-readable tags (paragraph [0008], . The wireless programmable user interaction system employs a portable interaction device (FIG. 1, 108) in wireless communication with a local computer network (FIG. 1, 114, 116), the portable interaction device including a portable computing device (FIG. 1, 112), with a payload processor (FIG. 2, 218), and an associated machine-readable tag reader (FIG. 1, 110), wherein the portable interaction device generates tag identity information (FIG. 2, 204) relating to a selected physical object (FIG. 1, 104) upon operating the machine-readable tag reader to read a machinereadable tag (FIG. 1,102) associated with the selected physical object. The wireless programmable user interaction system also includes an interaction system catalog (FIG. 2, 208) that can indicate the types of information, interactions and computer network services that are available for the selected physical object, in the portable computing device of the portable interaction device, that stores tag format information that correlates the tag identity information with an identity information category (FIG. 2, 204) and related information to obtain one or more functional payloads operable by the payload processor (FIG. 2, 218). (paragraph [0007]) The system also includes a payload delivery service (FIG. 2, 214) that delivers to the payload processor (FIG. 2,

218) a selected functional payload, received via the wireless communication (FIG. 1, 114), to be executed by the payload processor to provide to the user a networked service corresponding to the selected physical object; and a payload server (FIG. 2, 222) communicating with the local computer network via a public global computer network (FIG. 1, 116) and providing the selected functional payload to the payload delivery service (FIG. 2, 214) via the public global computer network and the wireless communication. Furthermore, the system employs a catalog explorer module (FIG. 2, 228) that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags (paragraphs [0020], [0022], [0024]).

And furthermore, as illustrated in independent Claim 24, the Appellants claim a wireless programmable user interaction system providing user interaction with networked services relating to physical objects that have associated machine-readable tags which provides information, interactions and computer services for a given physical object. (paragraph [0008], FIG. 2, 100) The wireless programmable user interaction system employs a portable interaction device (FIG, 1, 108) in wireless communication with a computer network (FIG. 1, 114), the portable interaction device including a portable computing device (FIG.1, 112), with a payload processor (FIG. 2, 218) and an associated machine-readable tag reader (FIG. 1, 112), wherein the portable interaction device generates tag identity information (FIG. 2, 204) relating to a selected physical object (FIG. 1, 104) upon operating the machine-readable tag reader to read a machinereadable tag associated (FIG. 1, 102) with the selected physical object. (paragraph [0006]. The wireless programmable user interaction system further includes an interaction system catalog (FIG. 2, 208) that can indicate the types of information, interactions and computer network services that are available for the selected physical object, in the portable computing device of the portable interaction device, storing tag format information that correlates the tag identity information with an identity information category (FIG. 2, 204) to obtain one or more functional payloads operable by the payload processor (FIG. 2, 218; paragraph [0007]). The wireless programmable user

interaction system further includes a payload delivery service (FIG. 2, 214) that delivers to the payload processor (FIG. 2, 218) a selected functional payload, received via the wireless communication (FIG. 1. 114), to be executed by the payload processor that includes a browser that executes the selected functional payload at the portable interaction device to provide to the user a networked service corresponding to the selected physical object. (paragraph [0007]) Additionally, the wireless programmable user interaction system further includes a catalog explorer module (FIG. 2, 228) that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags. (paragraphs [0020], [0022], [0024])

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL.

In the Final Office Action dated June 2, 2008, Claims 1-24 were rejected under 35 USC 103(a) as being unpatentable over Wilz, Sr. et al. (U.S. Patent No. 5,992,752), hereinafter Wilz, in view of Perkowski (U.S. Patent No. 7,089,199), and Mulla et al., U.S. Patent No. 6,119,944, hereinafter Mulla.

VII. ARGUMENT

A. Request for Examiner Interviews Denied

The Appellants requested Examiner Interviews for the last two actions which were denied by the Examiner. As a result, the Appellants were unable to discuss the following arguments with the Examiner.

B. The 35 USC 103 Rejection of Claims 1-24.

Claims 1-24 were rejected under 35 USC 103(a) as being unpatentable over Wilz, Sr. et al. (U.S. Patent No. 5,992,752), hereinafter Wilz, in view of Perkowski (U.S. Patent

No. 7,089,199), and Mulla et al., U.S. Patent No. 6,119,944, hereinafter Mulla. The Examiner contended that Wilz teaches all of the features of the Appellant's claimed invention, but does not teach an interaction system catalog storing tag format information that correlates the tag identity information with an information category to obtain one or more functional payloads operable by the payload processor. The Examiner, however, further contended that Perkowski discloses this features, thereby rendering the Appellant's claims obvious. Furthermore, the Examiner contended that Perkowski does not teach that the interaction system catalog (or local database) is in the portable computing device of the portable interaction device, but this limitation is taught by Mulla. The Appellants respectfully disagree with this contention of obviousness.

In order to deem the Appellants' claimed invention unpatentable under 35 USC 103, a prima facie showing of obviousness must be made. To make a prima facie showing of obviousness, all of the claimed elements of an Appellants' invention must be considered, especially when they are missing from the prior art. If a claimed element is not taught in the prior art and has advantages not appreciated by the prior art, then no prima facie case of obviousness exists. The Federal Circuit court has stated that it was error not to distinguish claims over a combination of prior art references where a material limitation in the claimed system and its purpose was not taught therein (*In Re Fine*, 837 F.2d 107, 5 USPQ2d 1596 (Fed. Cir. 1988)).

The Appellant's claimed invention provides links between physical objects and the rich information, interactions, and other services that are available over computer networks. A wireless programmable user interaction system allows a user to interact with networked services relating to physical objects that have associated machine-readable tags. The machine-readable tags may be of virtually any format, including bar codes and radio frequency identifiers (RFIDs), for example. (Summary, paragraph [0005]).

The Appellants claimed system can employ a portable interaction device in wireless communication with a local computer network. The portable interaction device

includes a portable computing device such as a hand-held computer, a tablet computer, a cellular telephone, etc., and an associated machine-readable tag reader (e.g., a bar code reader). With such a portable interaction device, a user may scan the tag of a physical object (e.g., a book in a shop, a product in a grocery store, art in a gallery, etc.) and generate tag identity information relating to the physical object. (Summary, paragraph [0006])

An interaction system catalog in the portable computing device stores tag format information that correlates the tag identity information with an identity information category and related information. As a result, the interaction system catalog can indicate the types of information, interactions, or other computer network services that are available and relevant to the physical object. Upon selection of a desired network service by a user, a functional payload is delivered to the portable computing device over the wireless network connection to be executed or rendered (collectively, executed). The functional payload may be executed directly by the portable computing device or, as in one implementation, by a browser running on the portable computing device. The functional payload may originate from the local network with which the wireless communication takes place or from any payload server located anywhere on the public global computer network. (Summary, paragraph [0007])

In addition to the tag format information, user interaction system catalog 208 stores identifiers or indications of one or more payloads 216 that are available for the type of the identity information 204, and also a computer network address indicating a location for each payload 216. Optionally, user interaction system catalog 208 may also store identifiers or indications of one or more payloads 216, and associated network addresses, that are available for specific identity information 204. (paragraph [0024]).

Payload delivery service 214 also functions to receive from the user an indication of which function or operation is selected, and retrieves the corresponding payload 216 for execution, rendering, etc. The payload 216 is executed by a payload processor 218, which may represent either direct processing by portable computing

device 112 or processing by a browser operating on portable computing device 112 according to the format or language of payload 216. The payload 216 corresponding to the operation or function that is selected by the user may reside in a local memory 220 on the portable computing device 112, but more generally will be stored at one of one or more payload servers 222 that are remote from portable computing device 112, whether connected directly to the local computer network or in communication with it from another location on public global computer network (e.g., Internet) 116. (paragraph [0028])

To accommodate such a range of classes, categories, or formats of identity information 204, wireless programmable user interaction system 100 includes a catalog explorer system 228 that provides a resolution service that resolves or conforms the list of payloads 216 in user interaction system catalog 208 with the class, category, or format of identity information 204 corresponding to one or more recently read tags. Catalog explorer system 228 obtains information to access relevant and available payloads 216 and updates catalog 208 accordingly. Catalog explorer system 228 may obtain payload information directly from payload servers 222 or from a database 230 of available payloads. (paragraph [0033])

In contrast, Wilz teaches an Internet-based system for enabling information-related transactions over the internet using Java-enabled internet terminals provided with bar code symbol readers for reading Java-Applet encoded bar code symbols. The transaction-enabling Java-Applet is embedded within 2-D bar code symbol. An HTML-encoded document and code associated with the transaction-enabling Java-Applet is created and stored in an HTTP server for use in enabling a predetermined information-related transaction. When a bar code symbol encoded with a transaction-enabling Java-Applet is read using a bar code symbol reader interfaced with a Java-enabled Internet terminal, the corresponding code is automatically accessed and the HTML-encoded document is displayed at the terminal, and the transaction-enabling Java-Applet initiated for execution so that the customer, consumer or client desiring the transaction can

simply and conveniently conduct the information-related transaction over the Internet. (Abstract)

Perkowksi teaches a technique for managing and delivering manufacturerspecified consumer product information to consumers in the marketplace. For a plurality of UPN-labeled consumer products offered for sale within a the marketplace, the manufacturer of the plurality of UPN-labeled consumer products or an agent thereof, accesses an Internet-enabled relational database and store therein, information elements representative of (1) a plurality of universal product numbers (UPNs) assigned to the plurality of UPN-labeled consumer products manufactured by the manufacturer and registered with the relational database, and (2A) a trademark (TM) symbolically linked to each the UPN, (2B) a product description (PD) symbolically linked to each the UPN, and (2C) one or more uniform resource locators (URLs) symbolically linked to each the UPN, wherein each the URL specifies the location of an information resource located on the Internet and related to one of the plurality of UPN-labeled consumer products registered with the relational database by the manufacturer, and wherein a UPN/TM/PD/URL data link is created and maintained in the relational database for each the UPN-labeled consumer product registered with the relational database by the manufacturer. A consumer within the marketplace transmits a request to the relational database from the Internet-enabled client computer. The UPN, TM and/or PD contained in the request enabled the consumer to access the URLs symbolically linked to the UPN, TM and/or PD, and the URLS are then transmitted to the Internet-enabled client computer for display to and use by a consumer in accessing information resources stored in the Internet-based product information servers, at the URLs. (Abstract)

Mulla teaches a hand-held bar code reader, in particular a bar code wand that is used by a consumer to read bar code information accompanying a product displayed at a retail outlet. The bar code information can be presented in, for example, UPC format and carries information relating to the products. The consumer subsequently downloads information stored in the reader via a suitable interface to a personal computer which accesses information identified by an address included in or comprising the bar

code information. The site contains additional information such as price information concerning the advertised product and the consumer may be able to pay for and order the product directly via the site. As a result the consumer has a simple reminder of the product, is able to obtain additional information concerning the product with minimum difficulty and can obtain the product itself with maximum ease. (Abstract)

1. The cited art of Wilz, Perkowski and Mulla, does not teach the
Appellants' claimed interaction system catalog in the portable computing device
that stores tag format information that correlates the tag identity information with
an identity information category and related information.

None of the cited art of Wilz, Perkowski and Mulla, teaches the Appellants' claimed interaction system catalog in the portable computing device that stores tag format information that correlates the tag identity information with an identity information category and related information, and that can indicate the types of information, interactions and computer network services that are available for the selected physical object.

More specifically, as stated by the Examiner, Wilz, does not teach the Appellants' claimed interaction system catalog in the portable computing device that stores tag format information that correlates the tag identity information with an identity information category and related information.

Perkowski also does not teach the Appellants' claimed interaction system catalog in the portable computing device that stores tag format information that correlates the tag identity information with an identity information category and related information, and that can indicate the types of information, interactions and computer network services that are available for the selected physical object. Granted, the Examiner says that the interaction system catalog is taught in Perkowski at FIG. 2A, col. 9 lines 27-32, but this cite merely refers to a UPN/URL data base that is resident on a non-portable client computer that connects to a server which also contains this

database. This Perkowski configuration requires that a user go to a computer that is hardwired to a network in order to obtain the types of information, interactions and computer network services that are available for a selected physical object, which would preclude a user from finding out this information in the field, while shopping or performing other tasks away from an office with a computer.

The Examiner further contends that the interaction system catalog in a portable computing device is taught by Mulla. Mulla, however, does not teach the Appellants' claimed interaction system catalog in the portable computing device stores tag format information that correlates the tag identity information with an identity information category and related information. The Examiner contends that Mulla's handheld bar code reader together with a computer is a portable interaction device in FIG. 7A. However, these are two separate devices, typically located in different locations, not a single portable computing device that comprises a bar code reader as claimed by the Appellants. In Mulla, a user scans the bar code for an object and downloads it to a separate standalone computer later in time (see FIG. 3). Mulla's configuration would also preclude a user from accessing information about an object at a store or other location remote from the computer.

2. <u>The cited art of Wilz, Perkowski and Mulla does not teach the Appellants' claimed catalog explorer module.</u>

Additionally, none of the cited art of Wilz, Perkowski and Mulla, teaches the Appellants' claimed catalog explorer module that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags.

More specifically, as stated by the Examiner, Wilz does not teach the Appellants' claimed catalog explorer module that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags.

Nor does Perkowski teach a catalog explorer module that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags.

Granted, the above-referenced Final Office Action stated the Appellant's arguments were fully considered but they are unpersuasive because the Examiner contends that Perkowski does teach the Appellant's claimed catalog explorer module that provides a resolution service that conforms a list of payloads in the user interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags. In support of this the Examiner cited col. 19, lines 43-64 and col. 5 lines 8-21 and col. 6 lines 13-15, which read as follows:

Cite 1: "As shown in FIG. 3C, the second (left-most) display field, the control frame 20B, is used to display a HTML-encoded document containing a GUI-based "control panel" 21 for the consumer product information finding and serving subsystem of the present invention. In the illustrative embodiment, this control panel 21 includes five Check Box type buttons, namely: a first Check Box type button 21A which, when selected, automatically activates the Manufacturer/Product Registration Mode of the subsystem; a second Check Box type button 21B which, when selected, automatically activates the Manufacturer Website Search Mode of the subsystem; a third Check Box type button 21C which, when selected, automatically activates the UPN-Directed Information Access Mode of the subsystem; a fourth Check Box type button 21D which, when selected, automatically activates the Trademark-Directed Search Mode; and a fifth Check Box type button 21F which, when selected, automatically activates the Product-Description Directed Search Mode of operation of the subsystem. Each of these Check Box type buttons is hot-linked to a particular HTML-encoded document residing on the IPD Server(s) 11 of the subsystem hereof." (emphasis added)

And,

<u>Cite 2:</u> "Another object of the present invention is to provide such a system, in which the URLs stored in the Internet-based product information database are categorically <u>arranged and displayed according to specific types of product information</u> (e.g., product specifications and operation manuals; product wholesalers and retailers; product advertisements and

promotions; product endorsements; product updates and reviews; product warranty/servicing; related or complementary products; product incentives including rebates, discounts and/or coupons; etc.) that relate to the kind of information required, desired or otherwise sought by consumers, wholesalers, retailers and/or trading partners; product prices at which the products are being offered for sale by a particular retailer; and the like." (emphasis added)

And.

Cite 3: "Another object of the present invention is to provide such a system with an number of different modes of operation, namely: a Manufacturer/Product Registration Mode, wherein manufacturers can register their companies and consumer products (e.g. UPC numbers and URLs) with the system; an UPN-Directed Information Access Mode, wherein consumers can access and display information menus containing UPC numbers linked to URLs pointing Web pages containing consumer product related information by scanning the UPC label on the consumer product or by entering the UPC number thereof into a data-entry screen displayed by the system in this mode; a Manufacturer Website Search Mode, wherein the home page of a manufacturer's Website can be automatically accessed and displayed by scanning the UPC label on any consumer product of the manufacturer or by entering the UPC number thereof into a data-entry screen displayed by the system in this mode; a Trademark-Directed Search Mode enabling consumers to use trademarks and/or trade names associated with consumer products to search for consumer-product related information registered within the system; and a ProductDescription Directed Search Mode enabling consumers to use product descriptors associated with particular consumer products to search for consumer-product related information registered within the system." (emphasis added)

From the above cites one can see that the Perkowski system does not have a catalog explorer module that provides a resolution service that conforms a list of payloads in the user interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags. The first cite of Perkowski merely describes a UI for setting up the Perkowski system to one of five operation modes. As described in cite 1, each of the modes is hot-linked to a particular HTML-encoded document on the server (last sentence in cite 1). The second cite merely describes how information is organized on a display in the Perkowski system. The third cite describes the different types of data for different modes. In Perkowski, there is no need for a resolution service that conforms a list of payloads with a class category or format of identity information corresponding to one or

more recently read tags because the Perkowski system processes information based on the mode it is in, and each mode is linked to a particular, given HTML document, not using a resolution service that conforms a list of payloads with a class, category or format of identity information corresponding to one or more recently read tags. In Perkowski, HTML-encoded documents on the server are used to access data for the mode or modes the system is in at that time.

3. The cited art of Wilz, Perkowski and Mulla does not teach the Appellants' claimed payload delivery service resident on the portable interaction device that wireless delivers a payload to the payload processor on the portable interaction device.

The cited art of Wilz, Perkowski and Mulla, also does not teach the Appellants claimed payload delivery service that delivers to the payload processor on the portable interaction device a selected functional payload, received via the wireless communication, to be executed by the payload processor to provide to the user a networked service corresponding to the selected physical object.

More specifically, the Examiner argues that Wilz teaches the payload delivery service at FIG. B, col 21 lines 12-18 and 52-67, col. 22 lines 19-36, but these passages and associated figures do not teach a payload delivery service that delivers a payload to a payload processor on the portable interaction device that allows a user to access a payload in the field. The Examiner states that payloads are delivered to the portable bar code scanner and displayed on a GUI interface, but this is not in fact the case. The bar code scanner is merely used to scan objects and send their bar codes to a non-portable computer hardwired to the Internet. In Wilz, any manipulation of data/payloads occurs on this non-portable computer hardwired to a network. Bar code data is merely downloaded to this non-portable computer from the portable scanner.

Additionally, Mulla and Perkowski do not teach the Appellants' claimed payload delivery service that delivers to the payload processor a selected functional payload,

received via the wireless communication, to be executed by the payload processor to provide to the user a networked service corresponding to the selected physical object. The Appellants' payload delivery service, which resides on the portable interaction device with its payload processor, allows a user to immediately retrieve a payload while they are shopping or performing other tasks, without the necessity of going to a computer that is hardwired to a network. This allows transmission of information or other functional payloads immediately, in the field, when this information is the most useful.

Accordingly, Wilz in combination with the Perkowski and Mulla references do not teach the advantageous features of the Appellants' claimed invention such as an interaction system catalog that can indicate the types of information, interactions and computer network services that are available for the selected physical object, in the portable computing device; a payload delivery service that delivers to the payload processor a selected functional payload, received via the wireless communication, to be executed by the payload processor to provide to the user a networked service corresponding to the selected physical object; and a catalog explorer module that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags. These features are advantageous in that they allow a user to obtain information about a physical object while shopping or in the field. Accordingly, no prima facie case of obviousness has been established in accordance with the holding of In Re Fine. This lack of prima facie showing of obviousness means that the rejected claims are patentable under 35 USC 103 over Wilz in combination with the Perkowski and Mulla. As such, it is respectfully requested that Claims 1-24 be allowed based on the following exemplary claim language:

As to Claim 1.

"a portable interaction device in wireless communication with a computer network, the portable interaction device including a portable

computing device, with a payload processor and an associated machinereadable tag reader, wherein the portable interaction device generates tag identity information relating to a selected physical object upon operating the machine-readable tag reader to read a machine-readable tag associated with the selected physical object;

an interaction system catalog that can indicate the types of information, interactions and computer network services that are available for the selected physical object, in the portable computing device of the portable interaction device, storing tag format information that correlates the tag identity information with an identity information category to obtain one or more functional payloads operable by the payload processor; and

a payload delivery service that delivers to the payload processor a selected functional payload, received via the wireless communication, to be executed by the payload processor to provide to the user a networked service corresponding to the selected physical object; and

a catalog explorer module that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags." (emphasis added)

As to Claim 12,

"In a portable interaction device with means for wireless communication with a computer network, the portable interaction device including a portable computing device and an associated machine-readable tag reader, wherein the portable interaction device generates tag identity information upon operating the machine-readable tag reader to read a machine-readable tag, user interaction software stored on the portable computing device and providing user interaction with networked services relating to selected physical objects that have associated machine-readable tags, comprising:

a payload processor operating on the portable computing device comprising a tag reader;

an interaction system catalog that can indicate the types of information, interactions and computer network services that are available for the selected physical object, in the portable computing device of the portable interaction device, storing tag format information that correlates the tag identity information with an identity information category to obtain one or more functional payloads operable by the payload processor; and

a payload delivery service that delivers to the payload processor a selected functional payload, received via the wireless communication, to be executed by the payload processor to provide to the user a networked service corresponding to the selected physical object; and

a catalog explorer module that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags."

As to Claim 19.

"a portable interaction device in wireless communication with a local computer network, the portable interaction device including a portable computing device, with a payload processor, and an associated machine-readable tag reader, wherein the portable interaction device generates tag identity information relating to a selected physical object upon operating the machine-readable tag reader to read a machine-readable tag associated with the selected physical object;

"an interaction system catalog that can indicate the types of information, interactions and computer network services that are available for the selected physical object, in the portable computing device of the portable interaction device, that stores tag format information that correlates the tag identity information with an identity information category and related information to obtain one or more functional payloads operable by the payload processor;"

"a payload delivery service that delivers to the payload processor a selected functional payload, received via the wireless communication, to be executed by the payload processor to provide to the user a networked service corresponding to the selected physical object..."; and

"a catalog explorer module that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags."

As to Claim 24,

"a portable interaction device in wireless communication with a computer network, the portable interaction device including a portable computing device, with a payload processor and an associated machine-readable tag reader, wherein the portable interaction device generates tag identity information relating to a selected physical object upon operating the machine-readable tag reader to read a machine-readable tag associated with the selected physical object;"

"a payload delivery service that delivers to the payload processor a selected functional payload, received via the wireless communication, to be executed by the payload processor that includes a browser that executes the selected functional payload at the portable interaction device to provide to the user a networked service corresponding to the selected physical object; and

a catalog explorer module that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags."

VIII. Summary

For the foregoing reasons, it is respectfully submitted that the Examiner's rejection of Claims 1-24 was erroneous. As such, reversal of the Examiner's decision is respectfully requested at the earliest opportunity.

Respectfully submitted,

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VIII. CLAIMS APPENDIX.

1. A wireless programmable user interaction system providing user interaction with networked services relating to physical objects that have associated machine-readable tags, comprising:

a portable interaction device in wireless communication with a computer network, the portable interaction device including a portable computing device, with a payload processor and an associated machine-readable tag reader, wherein the portable interaction device generates tag identity information relating to a selected physical object upon operating the machine-readable tag reader to read a machine-readable tag associated with the selected physical object;

an interaction system catalog that can indicate the types of information, interactions and computer network services that are available for the selected physical object, in the portable computing device of the portable interaction device, storing tag format information that correlates the tag identity information with an identity information category to obtain one or more functional payloads operable by the payload processor; and

a payload delivery service that delivers to the payload processor a selected functional payload, received via the wireless communication, to be executed by the payload processor to provide to the user a networked service corresponding to the selected physical object; and

a catalog explorer module that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags.

2. The system of claim 1 in which the computer network includes a public global computer network and the system further comprises a payload server that provides the selected functional payload via the public global computer network and the wireless communication.

- 3. The system of claim 1 further comprising a filter that identifies the identity information category of the tag identity information from among plural identity information categories stored in the interaction system catalog.
- 4. The system of claim 3 further wherein the catalog explorer module provides to the interaction system catalog via the wireless communication information to obtain one or more functional payloads that are operable by the payload processor and to provide networked services that are compatible with the identity information category of the tag identity information.
- 5. The system of claim 1 further comprising a component that retrieves from the interaction system catalog an indication of plural selectable network services that relate to the selected physical object, wherein the selected functional payload corresponds to one of the plural selectable network services.
- 6. The system of claim 5 in which the payload delivery service provides the user with indications of the plural selectable network services and in which the user selects the network service corresponding to the selected functional payload.
- 7. The system of claim 1 in which the machine-readable tags are bar code tags.
- 8. The system of claim 1 in which the networked service includes storing at a network location a user annotation relating to the selected physical object.
 - 9. The system of claim 1 in which the portable computing device is generally

programmable.

- 10. The system of claim 1 in which the payload processor includes a browser that executes the selected functional payload.
- 11. The system of claim 1 in which the payload processor provides execution of the selected functional payload directly by the portable computing device.
- 12. In a portable interaction device with means for wireless communication with a computer network, the portable interaction device including a portable computing device and an associated machine-readable tag reader, wherein the portable interaction device generates tag identity information upon operating the machine-readable tag reader to read a machine-readable tag, user interaction software stored on the portable computing device and providing user interaction with networked services relating to selected physical objects that have associated machine-readable tags, comprising:

a payload processor operating on the portable computing device comprising a tag reader;

an interaction system catalog that can indicate the types of information, interactions and computer network services that are available for the selected physical object, in the portable computing device of the portable interaction device, storing tag format information that correlates the tag identity information with an identity information category to obtain one or more functional payloads operable by the payload processor; and

a payload delivery service that delivers to the payload processor a selected functional payload, received via the wireless communication, to be executed by the payload processor to provide to the user a networked service corresponding to the selected physical object; and

a catalog explorer module that provides a resolution service that conforms a list

of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags.

- 13. The device of claim 12 further comprising a filter that identifies the identity information category of the tag identity information from among plural identity information categories stored in the interaction system catalog.
- 14. The device of claim 13 further comprising a catalog explorer that provides to the interaction system catalog via the wireless communication information to obtain one or more functional payloads that are operable by the payload processor and to provide networked services that are compatible with the identity information category of the tag identity information.
- 15. The device of claim 12 further comprising a component that retrieves from the interaction system catalog an indication of plural selectable network services that relate to the selected physical object, wherein the selected functional payload corresponds to one of the plural selectable network services.
- 16. The device of claim 15 in which the payload delivery service provides the user with indications of the plural selectable network services and in which the user selects the network service corresponding to the selected functional payload.
- 17. The device of claim 12 in which the portable computing device is generally programmable.
- 18. The device of claim 12 in which the payload processor includes a browser that executes the selected functional payload.

19. A wireless programmable user interaction system providing user interaction with networked services relating to physical objects that have associated machine-readable tags, comprising:

a portable interaction device in wireless communication with a local computer network, the portable interaction device including a portable computing device, with a payload processor, and an associated machine-readable tag reader, wherein the portable interaction device generates tag identity information relating to a selected physical object upon operating the machine-readable tag reader to read a machine-readable tag associated with the selected physical object;

an interaction system catalog that can indicate the types of information, interactions and computer network services that are available for the selected physical object, in the portable computing device of the portable interaction device, that stores tag format information that correlates the tag identity information with an identity information category and related information to obtain one or more functional payloads operable by the payload processor;

a payload delivery service that delivers to the payload processor a selected functional payload, received via the wireless communication, to be executed by the payload processor to provide to the user a networked service corresponding to the selected physical object; and

a payload server communicating with the local computer network via a public global computer network and providing the selected functional payload to the payload delivery service via the public global computer network and the wireless communication; and

a catalog explorer module that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags.

- 20. The system of claim 19 further comprising a filter that identifies the identity information category of the tag identity information from among plural identity information categories stored in the interaction system catalog.
- 21. The system of claim 20 further comprising a catalog explorer that provides to the interaction system catalog via the wireless communication information to obtain one or more functional payloads that are operable by the payload processor and to provide networked services that are compatible with the identity information category of the tag identity information.
- 22. The system of claim 19 further comprising a component that retrieves from the interaction system catalog an indication of plural selectable network services that relate to the selected physical object, wherein the selected functional payload corresponds to one of the plural selectable network services.
- 23. The system of claim 22 in which the payload delivery service provides the user with indications of the plural selectable network services and in which the user selects the network service corresponding to the selected functional payload.
- 24. A wireless programmable user interaction system providing user interaction with networked services relating to physical objects that have associated machine-readable tags which provides information, interactions and computer services for a given physical object, comprising:

a portable interaction device in wireless communication with a computer network, the portable interaction device including a portable computing device, with a payload processor and an associated machine-readable tag reader, wherein the portable interaction device generates tag identity information relating to a selected physical object upon operating the machine-readable tag reader to read a machine-readable tag associated with the selected physical object;

an interaction system catalog that can indicate the types of information, interactions and computer network services that are available for the selected physical object, in the portable computing device of the portable interaction device, storing tag format information that correlates the tag identity information with an identity information category to obtain one or more functional payloads operable by the payload processor; and

a payload delivery service that delivers to the payload processor a selected functional payload, received via the wireless communication, to be executed by the payload processor that includes a browser that executes the selected functional payload at the portable interaction device to provide to the user a networked service corresponding to the selected physical object; and

a catalog explorer module that provides a resolution service that conforms a list of payloads in the interaction system catalog with a class, category or format of identity information corresponding to one or more recently read tags.

IX. EVIDENCE APPENDIX.

None

X. RELATED PROCEEDINGS APPENDIX.

None.